

TITLE

METHOD OF DECREASING LIQUIRITIGENIN-DERIVED ISOFLAVONES  
RELATIVE TO TOTAL ISOFLAVONES IN PLANTS AND  
PLANTS PRODUCING REDUCED RATIO OF LIQUIRITIGENIN-DERIVED  
ISOFLAVONES RELATIVE TO TOTAL ISOFLAVONES

ABSTRACT

This invention pertains to methods for decreasing the ratio of liquiritigenin-derived isoflavones relative to total isoflavone levels in isoflavonoid-producing plants and plant parts by transforming plants with a recombinant DNA construct comprising a nucleic acid sequence of at least 200 nucleotides and having at least 75% sequence identity to a polynucleotide encoding a chalcone reductase. More preferably, this invention pertains to methods for decreasing the ratios of daidzein and glycinein and their conjugates relative to total isoflavone levels in soybean plants and soybean plant parts by transforming plants with a recombinant DNA construct comprising a nucleic acid sequence of at least 200 nucleotides and having at least 75% sequence identity to a polynucleotide encoding a chalcone reductase.

20

25

30

35

LMC/dmm